

In addition to the above standards, ONEGlove Hazmat has successfully passed all testing criteria for the standard on structural fire fighting¹. Refer to Section 3 for information on the test results of the above standards.

NOTE:
Proper use is consistent with NFPA 1500 – *Standard on Fire Department Occupational Safety and Health Program, 29 CFR 1910.132*.

¹ *NFPA 1994 certification criteria do not allow ONEGlove Hazmat to be dual certified to both NFPA 1994 and structural fire fighting standards.*

SECTION 2A: Pre-Use Information

Safety considerations

All protective equipment needs to be well maintained in order to function properly. ONEGlove Hazmat is no exception. Users must read this guide thoroughly, and should take the following precautions into consideration:

1. Avoid direct flame contact. The glove is not intended for use in or near an open flame for extended periods of time.
2. Avoid continuous exposure to any known hazardous substance. Do not purposely expose the glove to a constant liquid/vapor hazard.
3. If the following symptoms are experienced, the user MUST leave the “hot zone”: fever, nausea,

dizziness, eye irritation, breathing difficulty, excessive fatigue, or any unusual odor or taste.

Limitations of use

This product is recommended for use as described in the standards to which it is certified. If it is suspected that this product has come into contact with a hazardous substance, dispose of it using appropriate departmental procedures.

Marking restrictions

It is recommended that this product not be marked in any way. Doing so may compromise the integrity of the product.

Closure recommendations

The design of this product allows for many different closure methods to seal it to the protective suit. Please refer to the user guide for the specific suit being used in conjunction with ONEGlove Hazmat for proper closure method(s).

Inner gloves

Because a moisture-management liner is integrated into this product, an inner glove is not necessary. While some users might find that an additional “comfort” liner is desirable, it is not recommended due to the decrease in dexterity and overall hand function that will result.

Shelf life

There is no shelf-life data for ONEGlove Hazmat. At a minimum, the glove system is to be both inspected and pressure-tested with the appropriate protective suit once a year. If there is any question about the condition of the product, discontinue use immediately.

SECTION 2B: Preparation for Use

Sizing

ONEGlove Hazmat has been sized to fit a wide range of users. Please refer to the diagram and table at right to find the appropriate size.

SECTION 2C: User Guide

Donning/Doffing Information

Donning and doffing procedures

ONEGlove Hazmat’s design allows it to be both donned and doffed with great ease. Once the glove is attached to the suit, the user can simply insert his or her hand into the glove.

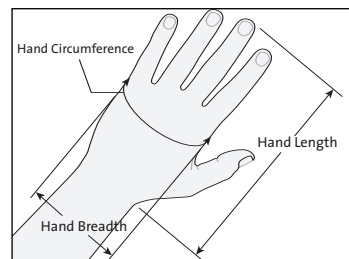
The majority of protective suits can accommodate ONEGlove Hazmat; please refer to the user guide of the particular suit for proper attachment procedures.

Interface issues

Should issues arise regarding the interface between the protective suit and ONEGlove Hazmat, please refer to the user guide for the suit or contact ONEGlove Technical Services at 1.800.451.6101.

Recommended storage practices

ONEGlove Hazmat should be stored in a safe and dry location, with temperature maintained between 25°F (-4°C) and 110°F (43°C). In addition, ONEGlove Hazmat is to be stored in a covered container that protects it against UV light.



Hand Length	Hand Circumference	Hand Breadth	Recommended Size	Product Codes Universal Cuff	Product Codes OEM-Specific Cuff
6-7/8	7 – 7-1/2	3-1/4	7 (Small)	22403M	22410M
7-3/8	7-1/2 – 8	3-1/2	8 (Medium)	22404M	22411M
7-7/8	8 – 9	3-5/8	9 (Large)	22405M	22412M
8-3/8	9 – 10	3-7/8	10 (x-Large)	22406M	22413M
8-7/8	10 – 11	4	11 (xx-Large)	22407M	22414M

NOTE: “Hand Length” is measured from tip of middle finger to wrist bone. “Hand Breadth” is measured at the base of the fingers. “Hand Circumference” is circumference at the base of the fingers.

Data is either identical to or extrapolated from the 1988 Army Anthropometric Survey summary statistics.

SECTION 2D: Maintenance and Cleaning Information

Cleaning instructions/precautions

This product may be laundered using a light detergent and the delicate setting on a standard washing machine. Dry ONEGlove Hazmat using low heat and the delicate cycle of any standard clothes dryer. WARNING: Do not use bleach as cleaning detergent.

Inspection details

A visual inspection of this product and a pressure test must be performed and passed prior to each use (in accordance with the requirements of the specific protective suit being used). If any tears or cuts in the glove are observed, discontinue use immediately. In addition, if the glove fails to pass the leak test criteria, discontinue use immediately. Record test results on the inspection log found on the reverse side.

Maintenance criteria

At a minimum, the glove system should be inspected and pressure-tested once a year with the protective suit it is to be used with. If there is any question about the condition of the product, discontinue use immediately. To pressure-test this product, please refer to the user guide for the specific suit for detailed instructions.

SECTION 3: Technical Data Package

ONEGLOVE® – PERFORMANCE: CERTIFICATION TESTING

NFPA 1991-2005 / NFPA 1992-2005 / NFPA 1994-2007

PHYSICAL PROPERTIES	METHOD	REQUIREMENT	RESULT
Cut Resistance (mm)	ASTM F 1790	25.0 min	>50.0
Puncture Resistance (kg)	ASTM F 1342	4.0 min	>14.0
Flammability Resistance – After Flame Time (sec)	ASTM F 1358	10.0 max after 12-sec exposure	0.0
Flammability Resistance – Char Length (in)	ASTM F 1358	4.0 max	<1.5
Liquid-Tight Integrity (Pass / Fail)	ASTM D 5151	No leakage after 1 hour	PASS

Chemical Permeation (after Flex and Abrasion)	Method	Requirement	Result
Acetone	ASTM F 739	Time to breakthrough 0.10µg/cm ² /min (60 minutes min)	>200†
Acetonitrile			>480
Ammonia			>480
1,3-Butadiene			>480
Carbon Disulfide			>480
Chlorine			>480
Dichloromethane			>480
Diethylamine			>480
Dimethylformamide			>480
Ethyl Acetate			>480
Ethylene Oxide			>480
Hexane			>480
Hydrogen Chloride			>480
Methanol			>480
Methyl Chloride			>480
Nitrobenzene			>480
Sodium Hydroxide			>480
Sulfuric Acid			>480
Tetrachloroethylene			>100
Tetrahydrofuran			>100
Toluene	>480		
Cyanogen Chloride (CK)	>60**†		
Carbonyl Chloride (CG)	>60**†		
Hydrogen Cyanide (HCN)	>60**†		
Dimethyl Sulfate	>480		
Sarin (SB)	ASTM F 739	Cumulative Permeation <1.25 µg/cm ² (after 1 hour)	>120†
Nerve Agent (VX)			>480
Distilled Mustard (DM)			>480
Lewisite (L)		Cumulative Permeation <4.0 µg/cm ² (after 1 hour)	>60†

** Testing stopped at 60 minutes.

† Chemical will be retested to 480 minutes.

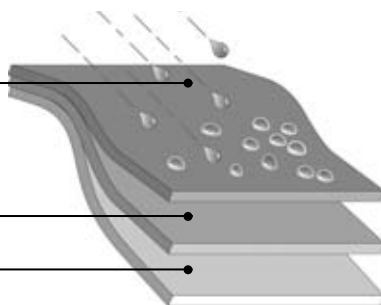
Structural Fire Fighting Tests:

PHYSICAL PROPERTIES	METHOD	REQUIREMENT	RESULT
Cut Resistance (mm)	ASTM F 1790	25.0 min	>50.0
Puncture Resistance (kg)	ASTM F 1342	4.0 min	>14
Donning Time (sec)	NFPA	10.0 max	<3.0
Hand Function (% Bare-Handed Control)	NFPA	300 min	<200
Thermal Protective Performance (cal/cm ²)	NFPA	35.0 min	>35.0 / >44.0*
Flammability Resistance – After Flame Time (sec)	NFPA	2.0 max	0.0
Flammability Resistance – Char Length (in)	NFPA	4.0 max	<1.5
Laundry Shrinkage (% of both length and width after 5 launderings)	AATCC 135	8.0 max	<1.5

*as tested after 5 launderings

ONEGlove Construction

Water Resistant
Cut and Puncture Resistant
(Made from KEVLAR®)



CHALLENGE® Chemical
Protective Barrier

Moisture Management
(Made from NOMEM®)